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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,395	12/19/2001	David A. Zimlich	MICS:0060	4824

7590

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EXAMINER

LE, DON P

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 02/13/2003


Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/025,395

Applicant(s)

ZIMLICH, DAVID A. 

Examiner

Don P Le

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2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-34 is/are allowed.
- 6) ☒ Claim(s) 1-7, 35-42 and 53-59 is/are rejected.
- 7) ☒ Claim(s) 8-17, 43-52 and 60-69 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |                                                                                                              |                                                                             |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> . | 6) <input type="checkbox"/> Other:                                          |

*Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-7, 35, 38-42 and 53-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Merritt et al. (US 5,790,448).

3. With respect to claim 1, figures 1-3 of Merritt discloses an integrated circuit comprising:

a programmable element (see column 1, lines 5-60, antifuse) located on the integrated circuit, the programmable element being coupled to a redundant circuit used to repair the integrated circuit; and

a source located in the integrated circuit (figure 1), the source adapted to be operatively coupled to the programmable element and to develop a programming signal sufficient to program the programmable element to activate the redundant circuit.

4. With respect to claims 2, 3, 54, Merritt teaches memory arrays (DRAM).

5. With respect to claims 4, 39, 55 and 56, Merritt teaches a plurality of programmable elements, each of the plurality of programmable elements being coupled to a respective redundant circuit (see column 1, lines 15-20).

6. With respect to claims 5, 40 and 57, Merritt teaches antifuse.
7. With respect to claims 6, 7, 41, 42, 58 and 59, Merritt teaches the voltage source adapted to deliver a high programming voltage.
8. With respect to claims 35, Merritt teaches a system comprising:  
  
a processor (it is inherent that DRAM of Merritt has to coupled to a processor of some sort in order to function).  
  
A programmable element (antifuse);  
  
A source located on the integrated circuit (figure 1).
9. With respect to claim 38, it is inherent that that a memory controller is connected to a memory chip.
10. With respect to claim 53, Merritt teaches testing of integrated circuit (see column 1, line 40-50. The claim is rejected for the same reason as claim 1.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  
  
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
12. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merritt et al. (US 5,7990,448). Merritt does not specifically disclose a system as claimed by applicant. However, it is well know in the art that memory are use is a

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computer system with processors coupled to memory circuit for the purpose of forming a complex computing system. It would have been obvious to one of ordinary skill of art at the time the invention was made to have implemented the apparatus of Merritt is a complex computing system with microprocessor coupled to memory circuit.

*Allowable Subject Matter*

13. Claims 18-34 are allowed.

14. Claims 8-17, 43-52 and 60-69 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is an examiner's statement of reasons for allowance:

With respect to claims 8, 43 and 60, the prior art does not teach a flyback pump.

With respect to claim 18, the prior art does not teach a test circuit located on the integrated circuit.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

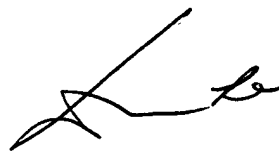
*Conclusion*

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don P Le whose telephone number is 703-308-4890. The examiner can normally be reached on 7AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Tokar can be reached on 703-305-3493. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

February 5, 2003

A handwritten signature in black ink, appearing to read 'Don P Le', with a stylized flourish at the end.

DON LE  
PRIMARY EXAMINER